REMARKS

The above amendment and these remarks are responsive to the Office action of Examiner Lambert L. Tran, mailed 5 April 2004.

Claims 1-20 are in the case, none having been allowed.

Specification

The specification has been objected to for the use of an embedded hyperlink at page 16, last paragraph.

The material to which the Examiner objects is provided as examples, to illustrate the nature of URL's 120. They are <u>not</u> intended to be active hyperlinks in the sense that the specification includes the material accessed by way of such hyperlinks. The Examiner refers to MPEP 608.01, which includes the following:

"Where the hyperlinks and/or other forms of browser-

executable codes are part of applicant's invention and it is necessary to have them included in the patent application in order to comply with the requirements of 35 U.S.C. 112, first paragraph, and applicant does not intend to have these hyperlinks be active links, examiners should not object to these hyperlinks. The Office will disable these hyperlinks when preparing the text to be loaded onto the USPTO web database.

This is the case here.

Applicants request that the objection to the specification be withdrawn.

35 U.S.C. 103

Claims 1-2, 12, 15-17 have been rejected under 35 U.S.C. 103 over Underwood, U.S. Patent 6,523,027, in view of Buzzeo et al. U.S. Patent 6,125,363 (hereinafter referred to as Buzzeo).

Claims 3-11, 13-14, 18-20 have been rejected under 35 U.S.C. 103(a) over Underwood and Buzzeo, further in view of

Ciarlante et al., U.S. Patent 6,594,819 (hereinafter referred to as Ciarlante).

Applicants have previously amended the independent claims in the case to clarify that their invention provides for making applications scalable depending upon the number and type of users (clients). Because servers in each cluster are running the same application and system code, the load balancing is done dynamically, based on the current load of servers in a cluster. This is done at a various places in the architecture (there being at least two clusters), and is described in applicants' specification in connection with Figures 1 and 15, such as at pages 16-17, 21, and 48-50.

None of the art references cited by the Examiner teach these concepts, taken singly or in any possible combination. Underwood is oriented toward object-oriented programming (OOP) and reusable objects as services (vs. Servers). This patent deals with a server retrieving data from a second server (specifically for the transfer of data, such as from a relational database), but does not discuss scalability or clustering of servers running mirror image system and application code which periodically replicate with each

other to maintain data consistency between them.

The Examiner noted that the mirror image concept was missing from claim 1, so applicants have amended claim 1 to recite mirror image systems in the second cluster, which is taught in their specification at page 17, line 7.

In their previous Amendment, applicants argued as follows:

Underwood is oriented toward object-oriented programming (OOP) and reusable objects as services (vs. Servers). This patent deals with a server retrieving data from a second server (specifically for the transfer of data, such as from a relational database), but does not discuss scalability or clustering a servers running mirror image system and application code to maximize performance.

To this, the Examiner responded as follows:

It is submitted that Underwood disclosed a Resource eCommerce Technology Architecture comprised of a plurality of first servers and second servers,

application server, database server [see Underwood,
Figure 47, and col. 2, lines 34-35].   (Office Action,
page 8.)

Applicants observe that Figure 47 shows web server
4706, application server 4708, and data base server 4710,
but there is no showing of clusters of servers running
mirror image system and application code and periodically
replicating with each other to maintain data consistency as
applicants now claim.   The reference to col. 2, lines 34-35
reads as follows:

"Additionally, generation of a plurality of the proxy
components by a user may be allowed."   [Underwood, Col.
2, lines 34-35].

Applicants assert that this very vague reference is not a
clear teaching of the plurality of clusters of servers, with
a second cluster running mirror image systems, as now
claimed.

The Examiner also asserts, referring to Col. 314, lines
47-56, that Underwood discusses scalability or clustering
[of] servers running mirror image systems.   (Office Action,

page 8.)   Underwood states:

> FIG. 127 shows the West Coast architecture 12700.   ACME
> is headquartered on the West Coast, therefore, this
> facility may be the primary location.   This location
> may have complete architectural fail-over using OSPF,
> as well as ISP fail-over and load balancing using BGP.
> The servers 12702 are connected into a fully redundant
> switch 12704 containing both routing and switch modules
> that is running a product equivalent to the Cisco Local
> Director ®.   The Local Director may automatically
> distribute load to all available servers.   [Underwood,
> Col 314, lines 47-56].

Applicants observe that this teaching of Underwood does not
specify that the available servers run mirror images of
system and application code on systems which replicate with
each other to maintain data consistency, nor is there a
teaching of the concept of two clusters, as is present in
applicants' claims as currently amended.

With respect to claims 1-2, 12, 15-17, claim 1 (and
thereby, claim 2) has been amended to specifically recite
"mirror image" and "replication".   This same concept is

brought out in claim 12, and similarly in claims 15-17, by reference to "each server in said second cluster running second _same_ application and system code" together with replication between the servers in the cluster. (Emphasis added).

With reference to Buzzeo, the Examiner asserts that clustering is taught in a plurality of tiers. Buzzeo teaches that a first tier comprises "at least one computer running a web browser", and a second tier comprises "at least one computer, wherein the computer runs a web server, a report server, and an application server." (Abstract. See also Col. 2, lines 7-20, col. 4, lines 19-34, col. 6, lines 17-20, col. 7 lines 65-67, and col. 8, lines 1-4 -- all of which speak in generally the same terms). As with Underwood, this does not teach clusters of servers running mirror image application and system code which replicate with each other to maintain data consistency within the cluster.

Claims 3-11, 13-14, 18-20 depend from claims 1, 12, and 15, and are distinguished from Underwood and Buzzeo as previously discussed, and incorporate the limitations currently added to the base claims. Ciarlante deals with

groupware on applications and users picking applications to use. Nothing about performance or scalability, such as servicing client requests by load balancing across multiple servers. Any scalability is stated in terms of larger servers or disk or memory capacity.

SUMMARY AND CONCLUSION

Applicants urge that the above amendments be entered and the case passed to issue with claims 1-20.

The Application is believed to be in condition for allowance and such action by the Examiner is urged. Should differences remain which do not place one/more of the remaining claims in condition for allowance, the Examiner is requested to phone the undersigned at the number provided below for the purpose of providing constructive assistance and suggestions in accordance with M.P.E.P. Sections 707.02(j) and 707.03 in order that allowable claims can be presented without further proceedings being necessary.

Sincerely,

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